

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
9 December 2004 (09.12.2004)

PCT

(10) International Publication Number
WO 2004/105961 A1

(51) International Patent Classification⁷: **B05B 11/04**

(21) International Application Number: **PCT/GB2004/002279**

(22) International Filing Date: 28 May 2004 (28.05.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

0312254.6	29 May 2003 (29.05.2003)	GB
0403650.5	19 February 2004 (19.02.2004)	GB
0409516.2	29 April 2004 (29.04.2004)	GB

(71) Applicant and

(72) Inventor: **HAYDAY, Geoffrey, Denis [GB/GB]**; 1 Cedar Drive, Barming, Maidstone, Kent ME16 9HD (GB).

(74) Agent: **NASH, Keith, Wilfrid; Keith W. Nash & Co., 90-92 Regent Street, Cambridge CB2 1DP (GB)**.

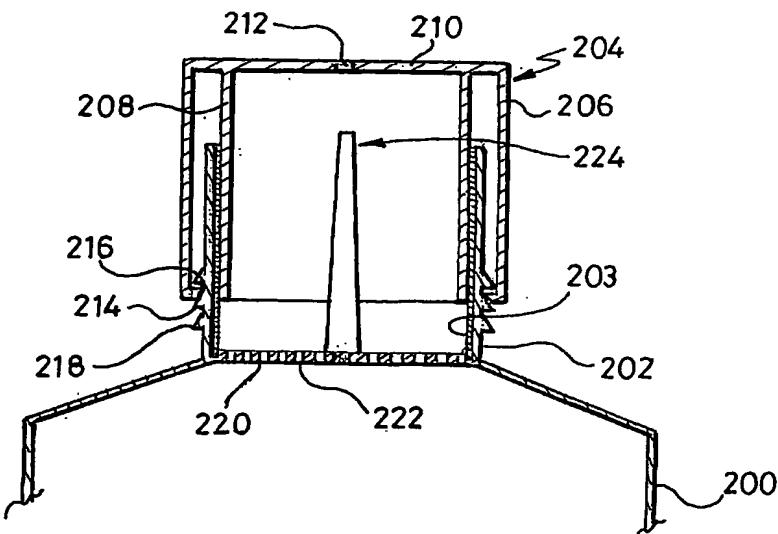
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— with international search report

[Continued on next page]

(54) Title: POWDER DISPENSER



(57) Abstract: A powder container (110) and dispensing device comprising a powder dispensing nozzle (114) of the type having one or more small holes through which powder can be ejected. The nozzle (114) is located in the wall of a container (110) which in use is partially filled with the powder, and powder is dispensed therefrom by squeezing the container (110) to pressurize its contents. An intermediate powder reservoir is provided within the container (110) in or on which some of the powder within the container (110) becomes lodged in use. On squeezing the container, powder lodging in or on the intermediate reservoir is entrained in the airflow through the hole or holes in the nozzle to be discharged therewith. In general during each discharge action only powder in or on the

intermediate reservoir will exit via the nozzle (114). The action of squeezing the container not only causes powder to leave the intermediate reservoir via the nozzle but also causes other of the powder in the container to replace the powder that has left the intermediate reservoir. In addition or alternatively replenishment is achieved by briefly squeezing, tilting or inverting or tilting and briefly squeezing the container. In this way the intermediate reservoir is replenished during or after each discharge ready to be discharged with the next squeeze of the container. The nozzle is provided at the end of a neck of the container, and the intermediate reservoir may comprise an apertured plate or a filter fitted in the neck of the container just below but spaced from the nozzle.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.